WILDLIFE HARVEST AND POPULATION STATUS REPORT

RING-NECKED PHEASANT - 2006

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2005-06 PHEASANT HUNTING SEASON

In 2005, 11,215 pheasant hunters killed 31,204 pheasants statewide; a 5.5% decrease in hunters and a 21.6% increase in harvest from 2004 (Figure 1). The estimated 2005 pheasant harvest decreased 0.7% from the 5-year average (2000–04; 31,430 average harvest; SD 7,567) and decreased 31.6% from the 10-year average (1995–04; 45,605 average harvest; SD 17,478). In 2005, pheasant hunters averaged 0.56 birds per day and 4.96 days per season compared to 0.60 birds per day and 3.92 days per season in 2004. Average season bag for 2005 was 2.78 birds which was a 28.7% increase compared to 2004. Regional harvest data for 2005 showed Northwestern Prairie had the highest estimated harvest (14,668 birds) and Mississippi Lowlands the lowest (0 birds; Figure 2). During 2005, Northwestern Prairie had the greatest number of hunters (4,705) with Mississippi Lowlands the lowest (42); hunters in the Northwestern Prairie spent 5.76 days pheasant hunting compared to 3.64 days in the Mississippi Lowlands.

2006 POPULATION SURVEYS

The Department annually cooperates with more than 450 rural mail carriers in mid-April to monitor the relative distribution of spring pheasant populations in northern and southeastern Missouri; these data also provide a relative with-in year distribution range map. The 2006 Rural Mail Carrier Survey (RMCS) reported 259 pheasants with an index of 0.64 birds per 100 miles (Figure 3).

The August Roadside Survey (ARS) monitors the number of pheasants and pheasant broods observed along standardized 30-mile routes, and has provided a fairly reliable predictor of fall pheasant harvests in previous years. The 2006 statewide results for the number of pheasants observed showed a 65.0% increase compared to 2005, a 149.5% increase compared to the 5-year average (2001-05), and a 102.7% increase from the 10-year average (1996-05; Table 1; Figure 4). Pheasant production in 2006, as determined by the number of broods observed, increased 90.0% compared to 2005, increased 291.8% compared to the 5-year average (2001-05), and increased 154.2% from the 10-year average (1996-05; Table 1). Regionally, Northwestern Prairie had the highest index of pheasants observed (7.00 birds/30 miles) and Mississippi Lowlands the lowest (0.00 birds/30 miles).

During 1988-06, there was a strong relationship (r=0.83) between ARS and fall pheasant harvest indicating that ARS may often provide a relatively good predictor of harvest for the upcoming fall season (Figure 3). With this in mind, statewide 2006 pheasant hunting opportunities are expected to be noticeably improved compared to the 2005 season, and better than the previous 5- and 10-year averages. Expect hunting opportunities to be best in the Northwestern Prairie, above average in the Northern

Riverbreaks and the Northeastern Riverbreaks, and poor in the Mississippi Lowlands. Although increases in the number of pheasants and pheasant broods observed in some areas around the state were recorded this year (Table 1), these relative trend values are still noticeably below trend values observed in other Midwestern states that comprise the primary pheasant range. For example, comparable data from Iowa's August Roadside Survey for 2006 showed 27.9 birds/30 mile route, so caution should be exercised when interpreting the increases in Missouri from this year (4.72 birds/30 mile route). Hunting opportunities will vary depending upon severe localized weather events during the nesting and brood-rearing season, and the resulting effects of those weather conditions on habitat.

PHEASANT RANGE EXPANSION PROGRAM

The Department attempted to expand the pheasant range in 14 northern Missouri counties by relocating wild trapped birds during 1987-00; all 23 targeted sites have been completed (Table 2). Evaluation data indicates mixed results. Some release sites showed relatively high numbers of crowing males along survey routes adjacent to the release sites, and showed some birds expanding into surrounding areas. Some releases showed relatively show relatively good numbers of birds around the release site, but the birds did not become numerous enough to be observed by rural mail carriers. Other release sites showed perpetually low numbers of birds that never disappeared, but never established thriving wild populations. Some releases were classified as failures for various reasons.

Table 1. The number of pheasants and broods observed along 30-mile routes in August by zoogeographic region, and relative change through time.

Zoogeographic Region	2006	% Change From 2005	% Change From 5-Year Mean (2001-05)	% Change From 10-Year Mean (1996-05)
Northwestern Prairie	7.00	8.7	73.1	64.3
Total Pheasants	1.18	25.5	118.5	104.20
Production Index				
Northern Riverbreaks	2.17	68.2	-2.3	-21.9
Total Pheasants	0.17	21.4	-43.3	-52.5
Production Index				
Northeastern Riverbreaks	4.20	49.7	127.5	143.2
Total Pheasants	0.60	62.2	240.9	195.6
Production Index				
Mississippi Lowlands	n/a[1]	n/a	n/a	n/a
Total Pheasants	n/a	n/a	n/a	n/a
Production Index				
STATEWIDE	4.72	65.0	149.5	102.7
Total Pheasants	0.76	90.0	291.8	154.2
Production Index				

[1]Data from the southeastern Mississippi Lowlands region continue to be recorded as zero (0) number of pheasants per 30-mile survey routes; relative changes from year-to-year would be meaningless.

Table 2. Release sites and numbers of wild-trapped pheasants per release, 1987-00.

RELEASE AREA	COUNTY	COMPLETED	NO. BIRDS (M:F)	SOURCE OF BIRDS
Novelty	Knox	1989	226 (66:145) (15 unk. sex)	Squaw Creek NWR Nebraska
*Franklin Island	Howard	1989	178 (58:120)	Squaw Creek NWR Mar. Tem. Clair CA
New Cambria	Macon	1990	100 (30:70)	Kansas
*Ardmore	Macon	1990	138 (53:85)	Squaw Creek NWR Kansas
Hannibal	Marion	1990	123 (22:101)	Squaw Creek NWR Bilby Ranch CA Bob Brown CA
Smileyville	Marion	1990	97 (21:76)	Kansas
Kaseyville	Randolph Macon	1991	143 (34:109)	Nebraska
Clifton Hill	Randolph	1991	144 (34:110)	Nebraska
Bethel	Shelby	1991	143 (33:110)	Bilby Ranch CA Grand Pass CA Bob Brown CA
Glasgow	Howard Chariton	1991	141 (27:114)	Kansas
Salisbury	Chariton	1991	135 (25:110)	Kansas
Rothville	Chariton	1993	112 (19:93)	Bob Brown CA South Dakota
Mendon	Chariton	1993	135 (38:97)	South Dakota Mo. Private Land
Bogard	Carroll	1993	123 (33:90)	South Dakota
Roads	Carroll	1993	121 (23:98)	South Dakota Mo. Private Land
Plymouth	Carroll	1994	176 (23:153)	South Dakota Mo. Private Land
Regal	Ray	1994	219 (39:180)	South Dakota
Stet	Ray	1994	179 (54:125)	South Dakota
Braley	Clinton	1996	141 (28:113)	South Dakota
West Keystone	Clinton	1996	165 (27:138)	South Dakota
Starfield	Clinton	1996	173 (40:133)	South Dakota
Plattsburg	Clinton	1996	156 (19:137)	South Dakota
Wexford	Clinton	2000	116 (32:84)	South Dakota

*Release sites classified as failures.

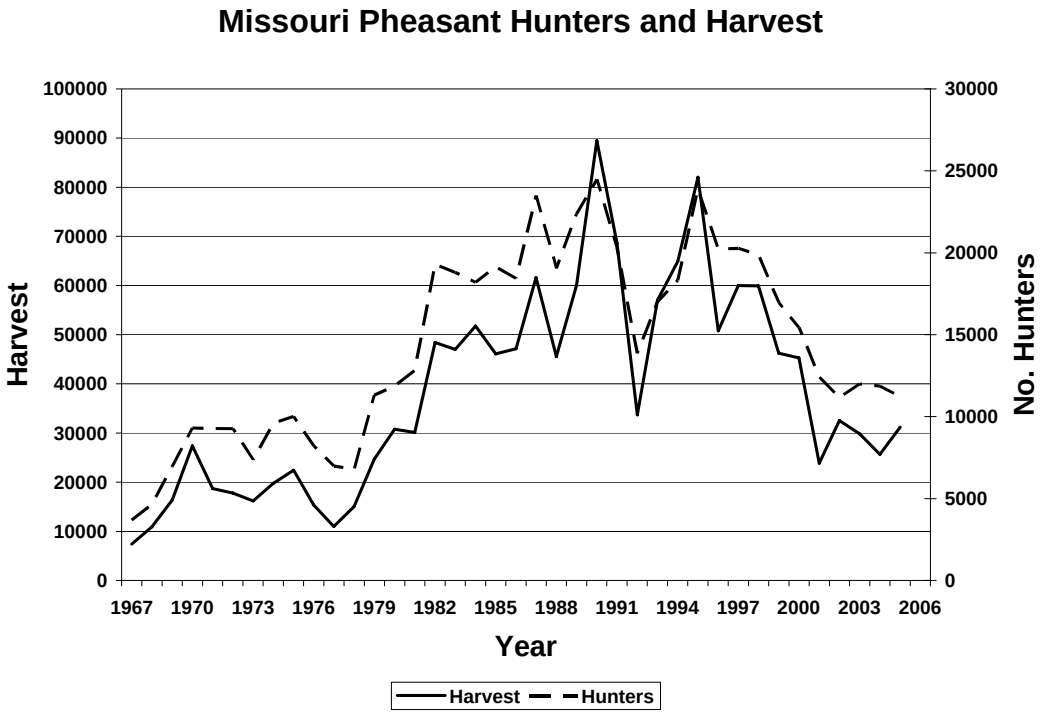

Figure 1. Number of ring-necked pheasant hunters and harvest estimated by the small-game post-season harvest mail survey (1967–05).

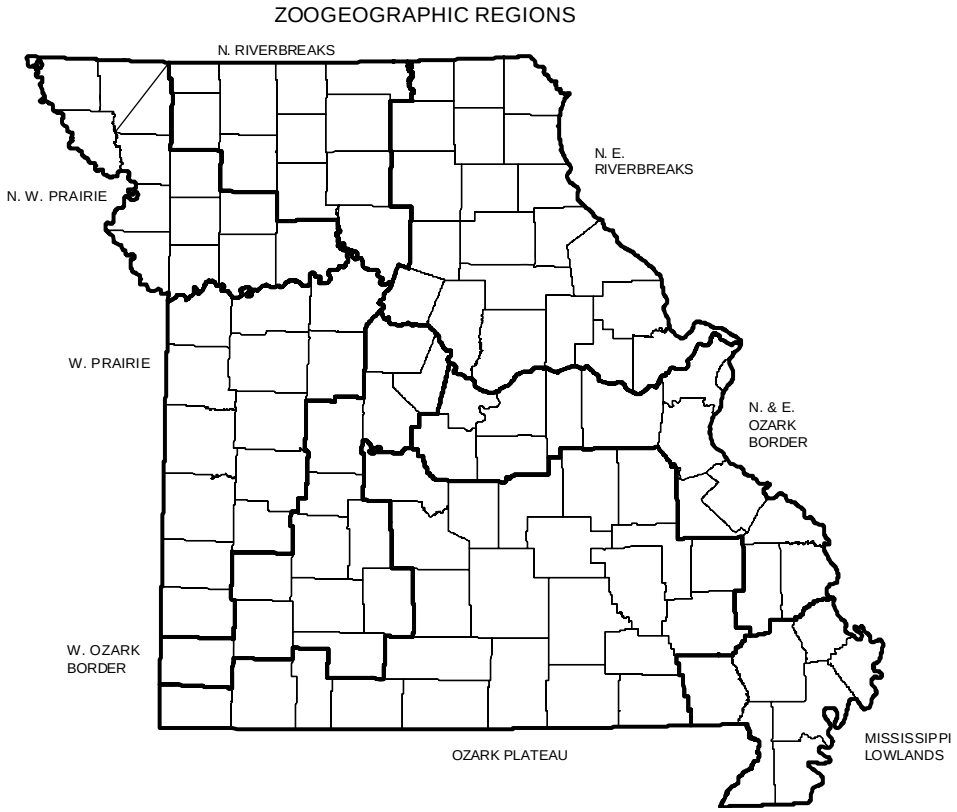

Figure 2. Zoogeographic Regions of Missouri.

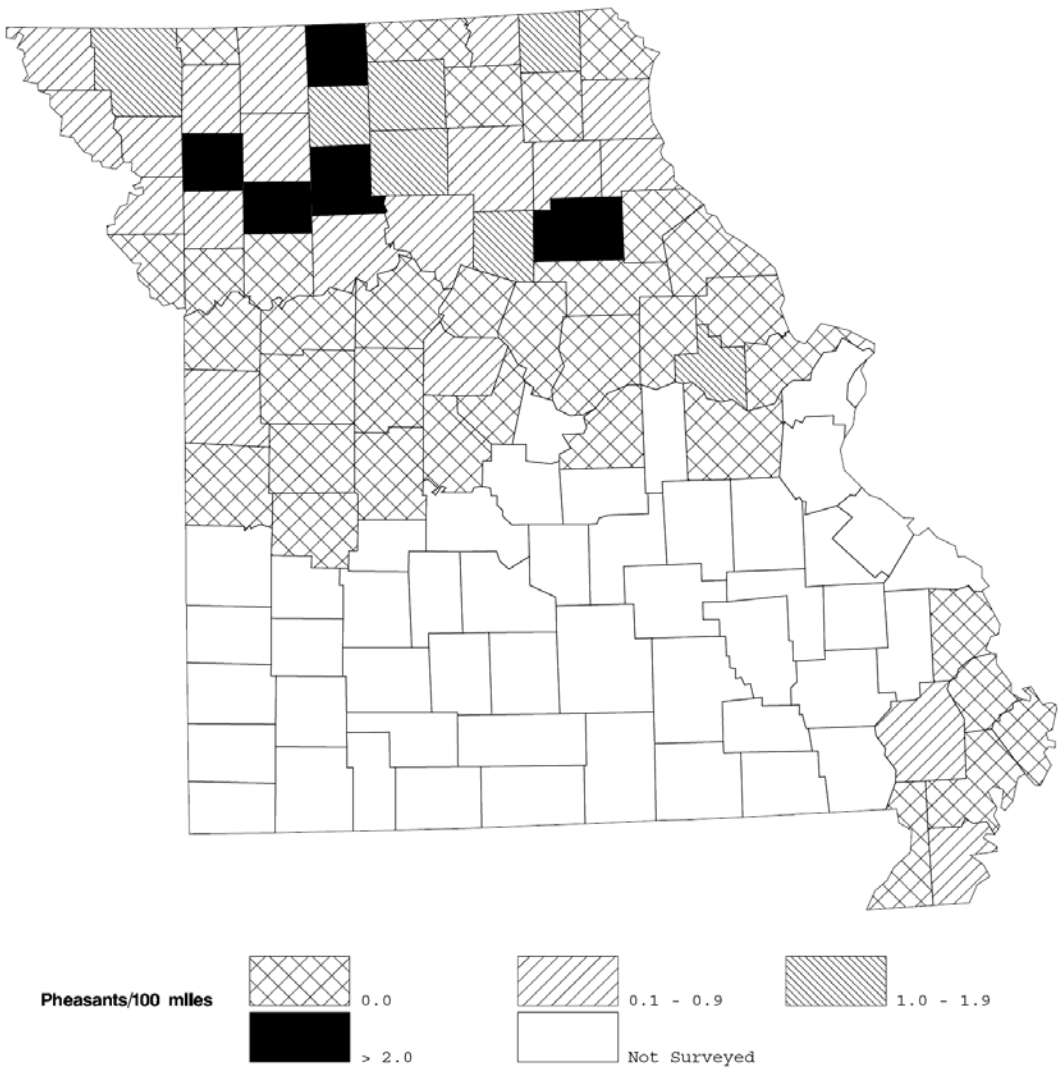

Figure 3. Relative distribution of Missouri spring pheasant populations derived from 487 completed rural mail carrier surveys, during April 2006.

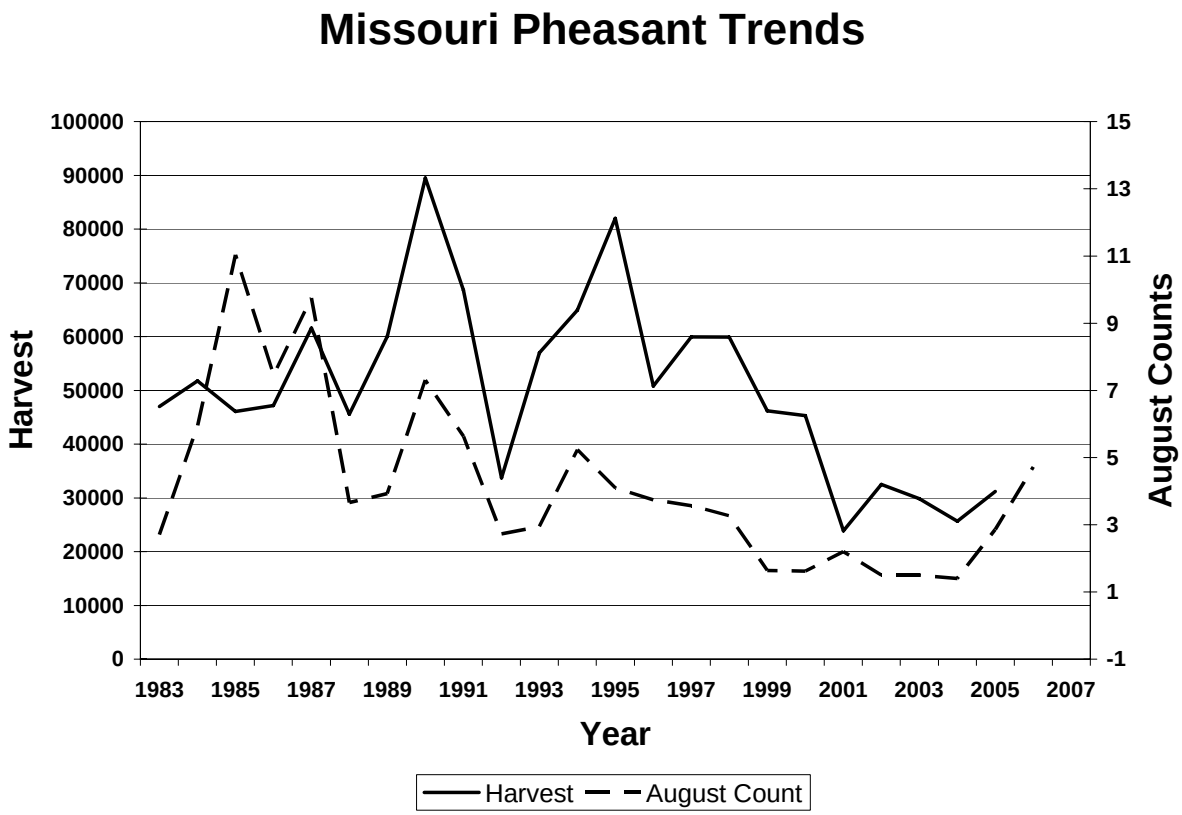

Figure 4. Estimated ring-necked pheasant harvest from the small-game post-season harvest mail survey (1983–05)and relative population trends from the August Roadside Survey (1983–06).